

Natural Gas The New U.S. Transportation Fuel

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Overview



- About Clean Energy
- Energy Outlook and Why Natural Gas as a U.S. Fuel
- Potential Market Penetration
- Deployment Strategies

About Clean Energy



Corporate Profile

- Founded in 1997 as Pickens Fuel Corp
 - Became Clean Energy in 2002
- Over 135 employees
- 170+ Stations
- Global headquarters in Seal Beach, CA

Comprehensive Services

- Design, build & operate NG fueling stations
- LNG production & delivery for HDVs
- Grant writing services (over \$100 million)
- Vehicle financing
- Publicly-traded as CLNE on NASDAQ



California LNG Production Plant & Station



Clean Energy's Newest LNG Plant in Boron, California

Operational November 2008

\$75 Million Investment

160,000 gal/day

Expanding to 240,000 gal/day at end of 2009

1.8 Million Gallons Storage





Renewable Natural Gas!



- Acquisition of McCommas Landfill, TX
 - 3rd largest landfill in U.S.
 - Producing 3.6 million cubic feet of gas per day into natural gas pipeline (>29,000 GGE/day)
 - Provides a <u>renewable portfolio</u> for Clean Energy
 - GHG benefits of renewable natural gas to be shared with customers



Industry Leading Statistics



Largest Alternative Transportation Fuel Provider

250+

Fleet Customers 14,000+

Natural Gas Vehicles 170 +

Natural Gas Fueling Stations

Compressed Natural Gas (CNG)



Liquefied Natural Gas (LNG)







2007 4th Qtr. OIL DEMAND 88 Million bbl/day

grows annually in a healthy world economy

2030 Projections: 120 104 mmbpd

Supply cannot meet demand

PRICES INCREASE

SHORTAGES DEVELOP

PRODUCTION reaches a maximum & then declines

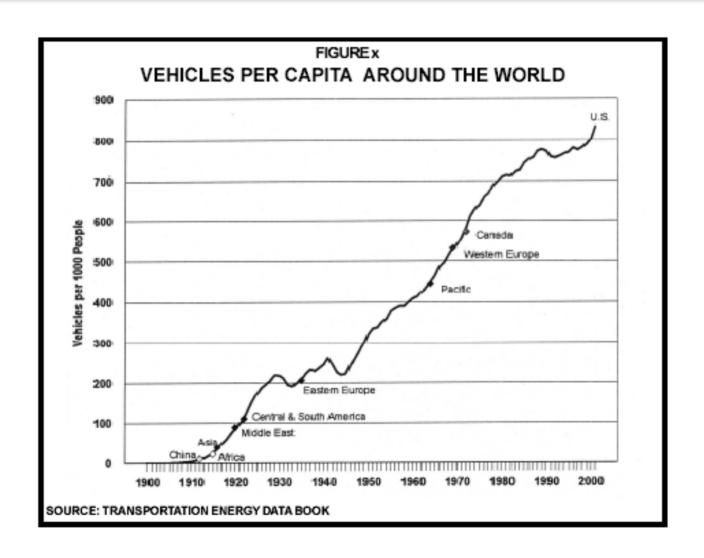
(2030: 28 mmbpd current prod.)

(2030: 53 mmbpd incl. undev. fields)

85 Million bbl/day



Global Oil Demand Will Continue to Grow



T. Boone Pickens





PickensPlan

"To put it plainly, T.
Boone Pickens is out
to save America."

-Carl Pope,
Executive Director,
Sierra Club

IT'S TIME TO STOP AMERICA'S ADDICTION TO FOREIGN OIL

America is in a hole and it's getting deeper every day. We import 70% of our oil at a cost of \$700 billion a year - four times the annual cost of the Iraq war.

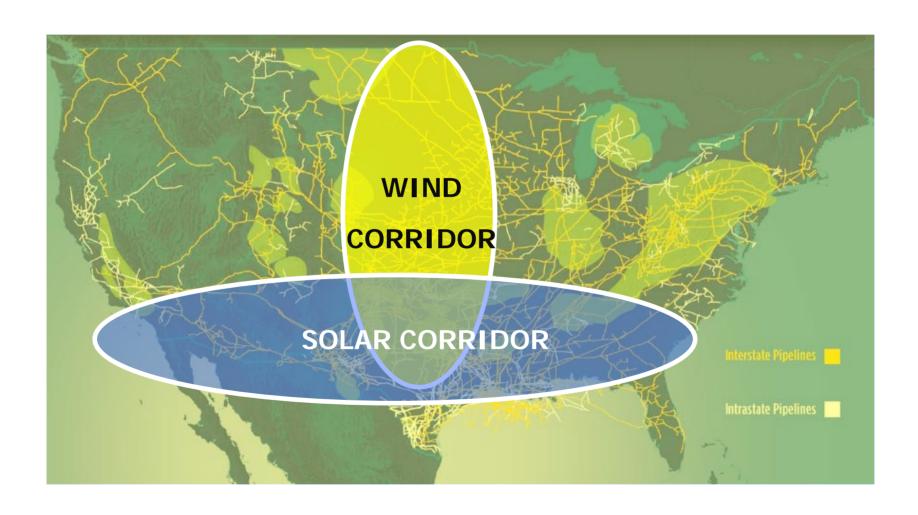
I've been an oil man all my life, but this is one emergency we can't drill our way out of. But if we create a new renewable energy network, we can break our addiction to foreign oil.

On January 20, 2009, a new President gets sworn in. If we're organized, we can convince Congress to make major changes towards cleaner, cheaper and domestic energy resources.

To get this done, I need your help. <u>Check out the plan</u>. If you think it's worth fighting for, please join out effort.



Potential for Renewable Power Generation



An Ocean of Natural Gas



- Only a few of the 22 top shale basins in the United States have been significantly explored
- Explosive growth in U.S. gas shales - Production increase from 0.3 Tcf/year in 1998 to 1.1 Tcf/year in 2007
- Since late 1990s, the largest producer of shale gas has been the Barnett Shale in the Forth Worth Basin = 6%
- Rapid increase in production rates in the Barnett, Fayetteville, Woodford, Haynesville and Marcellus Shale plays have spurred investment in pipeline infrastructure to bring this gas to the market
- 2240 TCF = 118 years





Potential Market Penetration "NG Shift from Power Generation to NGVs"

Opportunity for Market Penetration



- ~70% oil imports to U.S.
- 175 billion gallons/yr of on-road transportation fuel
 - 135 billion gallons gasoline/yr for on-road applications
 - 40 billion gallons diesel/yr for on-road applications
- 6.87 TCF/yr natural gas for power gen to NGVs
 - that could be displaced by renewables
- Adding NG as transportation fuel
 - Full U.S. NG demand greater than 80 year supply
 - Without any natural gas imports





- What does 7 TCF displace
 - 40% of on-road diesel = 16 billion gallons of diesel =
 1 million trucks
 - 28% of on-road gasoline = 38 billion gallons of gasoline = 30-50 million LD vehicles
- Natural gas is only fuel that can achieve significant foreign oil displacement



Deployment Strategy

Deployment Strategies



- Heavy-duty
 - Target goal of 1 million Class 7/8 trucks
 - Cornerstone is LA/LB Ports Goods Movement (40% of U.S. trade)
 - Enables shift of regional trucking for other Class 5/6 vehicles
 - Fosters urban "cluster to cluster" bridges both CNG and LNG
 - Ultimately coast to coast
- Light-duty page from OEM Hydrogen Handbook
 - Target regional cluster deployment strategy for 30-50 million vehicles
 - Educate society and dealer networks within clusters
 - Focus on regional sales and advertising
 - Lever cluster for mutual OEM and fuel provider sustainability

Clean Energy

Deployment Strategies - Infrastructure

- HD Trucks 16 billion DEGs
 - Primarily LNG for Class 7/8 trucks
 - Network of 2,000 5,000 stations nationwide (ref: 9,000 truck stops in U.S.)
 - \$14-20 billion for station infrastructure
 - \$20-30 billion for LNG production facilities
- LD Vehicles 38 billion GGEs
 - Predominantly CNG
 - Hydrogen network -12,000 stations address 70% of nation
 - Network of 20,000 to 45,000 stations (ref: 170,000 retail gasoline stations)
 - \$40-70 billion for station infrastructure

HD Product















LD Vehicles













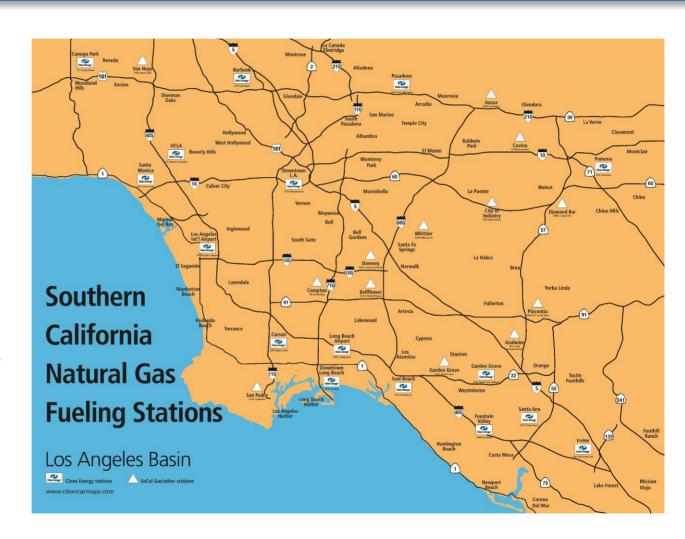






Los Angeles Infrastructure – Example Cluster

- 29 Stations on map
- 65 Stations in greater Los Angeles area
- Plus over 200 additional private stations
- GREAT MARKET
 OPPORTUNITY
 TO INTRODUCE
 PRODUCT



Call To Action



- Join the Pickens Army @ <u>WWW.PICKENSPLAN.COM</u>
 - Help drive a U.S. Energy Policy to break our addiction on oil!
- Participate in the California NGV Coalition
 - Support Natural Gas as a major component of the LCF Plan
 - Support AB 118 Funding Opportunities
- Go to LA Auto Show –

Let Toyota know you want a CNG Hybrid Camry



Thank you!

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